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Attorney's Docket No.: 15670-021001/SD9-141-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Nigam, et al.
Serial No.: 09/595,195
Filed : June 16, 2000
Title : EX-VIVO PROPAGATION OF KIDNEY

Art Unit: Unknown
Examiner: Unknown

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information Disclosure Statement and documents listed on form PTO-1449.

This filing is being made before the receipt of a first Office action on the merits. No fee is required.

The documents are in the English language; hence no concise explanation is necessary per Rule 98(a)(3).

Consideration of the foregoing and enclosures plus the return of a copy of the enclosed form PTO-1449 with the

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Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

Please apply any additional charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 9/10/03

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Substitute Form PTO-1449 (Modified) U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-021001	Application No. 09/595,195
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	Applicant Nigam, et al.	
	Filing Date June 16, 2000	Group Art Unit Unknown

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes	Translation No
	AL							
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	Qiao, et al., "Branching morphogenesis independent of mesenchymal-epithelial contact in the developing kidney", Proc. Natl. Acad. Sci., Vol. 96, pp. 7330-7335, June, 1999
	AR	Santos, et al., "Modulation of HGF-Induced Tubulogenesis and Branching by Multiple Phosphorylation Mechanisms", Developmental Biology, Vol. 159, pp. 535-548, 1993
	AS	Santos, et al., "HGF-Induced Tubulogenesis and Branching of Epithelial Cells is Modulated by Extracellular Matrix and TGF-ß", Developmental Biology, Vol. 160, pp. 293-302, 1993
✓	AT	Santos, et al., "Involvement of Hepatocyte Growth Factor in Kidney Development", Developmental Biology, Vol. 163, pp. 525-529, 1994

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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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/	AU	Barros, et al., "Differential tubulogenic and branching morphogenetic activities of growth factors: Implications for epithelial tissue development", Proc. Natl. Acad. Sci. Vol. 92, pp 4412-4416, May, 1995
/	AV	Pavlova, et al., "Evolution of gene expression patterns in a model of branching orphogenesis", Am. J. Physiol. Renal Physiol., Vol. 277, pp. F650-F663, 1999
/	AW	Grobstein, et al., "Inductive Epithelio-mesenchymal Interaction in Cultured Organ Rudiments of the Mouse", Science, Vol. 118, No. 3053, pp. 52-55, July 3, 1953
/	AX	Grobstein, "Morphogenetic Interaction between Embryonic Mouse Tissues separated by a Membrane Filter", Nature, Vol. 172, pp. 869-871, July 4, 1953-December 26, 1953
/	AY	Grobstein, et al., "Inductive Interaction in the Development of the Mouse Metanephros", The Journal of Experimental Zoology, Vol. 130, pp. 319-339, October, November, December, 1955
/	AZ	Saxen, Organogenesis of the Kidney, (table of contents) Cambridge University Press, Cambridge, 1987
/	AAA	Davies, et al., "Inductive Interactions between the Mesenchyme and the Ureteric Bud", Experimental Nephrology, Vol. 4, pp. 77-85, March-April, 1996
/	ABB	Vainio, et al., "Inductive Tissue Interactions, Cell Signaling and the Control of Kidney Organogenesis", Cell, Vol. 90, pp. 975-978, September 19, 1997
	ACC	Schofield, et al., "Growth Factors and Metanephrogenesis", Experimental Nephrology, Vol. 4, pp. 97-104, March-April, 1996
/	ADD	Nigam, "Determinants of branching tubulogenesis", Current Opinion in Nephrology and Hypertension, Vo. 4, No. 3, pp. 209-214, 1995
/	AEE	Sakurai, et al., "*In vitro* branching tubulogenesis: Implications for developmental and cystic disorders, nephron number, renal repair, and nephron engineering", Kidney International, Vol. 54, pp. 14-26, 1998
/	AFF	Schuchardt, et al., "Defects in the kidney and enteric nervous sytem of mice lacking the tyrosine kinase receptor Ret", Nature, Vo. 367, pp. 380-383, January 27, 1994
/	AGG	Durbec, et al., "GDNF signalling through the Ret receptor tyrosine kinase", Nature, Vol. 381, No. 6585, pp. 789-793, June 27, 1996
/	AHH	Sanchez, et al., "Renal agenesis and the absence of enteric neurons in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 70-73, July 4, 1996
/	AII	Pichel, et al., "Defects in enteric innervation and kidney development in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 73-76, July 4, 1996
/	AJJ	Moore, et al., "Renal and neuronal abnormalities in mice lacking GDNF", Nature, Vol. 382, No. 6586, pp. 76-79, July 4, 1996
/	AKK	Pepicelli, et al., "Rapid Communication GDNF Induces Branching and Increased Cell Proliferation in the Ureter of the Mouse", Developmental Biology, Vol. 192, pp. 193-198, 1997
/	ALL	Sakurai, et al., "An *in vitro* tubulogenesis system using cell lines derived from the embryonic kidney shows dependence on multiple soluble growth factors", Proc. Natl. Acad. Sci., Vol. 94, pp. 6279-6284, June, 1997
	AMM	Cantley, et al., "Regulation of mitogenesis, motogenesis, and tubulogenesis hepatocyte growth factor in renal collecting duct cells", American Journal of Physiology, Vol. 267, No. 2, pp. F271-F280, August, 1994

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	AOO	Sakurai, et al., "EGF receptor ligands are a large fraction of in vitro branching morphogens secreted by embryonic kidney", Am. J. Physiol. Vol. 273, No. 3, pp. F463-F472, September, 1997
	APP	Gumbiner, "Eithelial Morphogenesis", Cell, Vol. 69, pp. 385-387, May 1, 1992
	AQQ	Rodriguez-Boulan, et al., "Morphogenesis of the Polarized Epithelial Cell Phenotype", Science, Vol. 245, pp. 718-725, August 18, 1989
	ARR	Sukhatme, "Renal Development: Challenge and Opportunity", Seminars in Nephrology, Vol. 12, No. 4, pp. 422-426, September, 1993
	ASS	Vega, et al., "Glial cell line-derived neurotrophic factor activates the receptor tyrosine kinase RET and promotes kidney morphogenesis", Proc. Natl. Acad. Sci., Vol. 93, pp. 10657-10661, October, 1996
	ATT	Sainio, et al., "Glial-cell-line-derived neurotrophic factor is required for bud initiation from ureteric epithelium", Development, Vol. 124, pp. 4077-4087, October, 1997

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